1.0 PURPOSE AND NEED FOR PROPOSED ACTION

The National Environmental Policy Act (NEPA) of 1969 requires all Federal agencies to give appropriate consideration to potential environmental effects of proposed major actions in planning and decision-making. The Council on Environmental Quality (CEQ) is responsible for issuing regulations (40 Code of Federal Regulations [CFR] 1500 *et seq.*) implementing the provisions of NEPA. CEQ regulations in turn are supplemented by procedures adopted on an agency-specific basis. For the Department of the Army (DA), the pertinent regulations are contained in Army Regulation (AR) 200-1 and 32 CFR 650, *Environmental Protection and Enhancement*, and AR 200-2 and 32 CFR 651, *Environmental Analysis of Army Actions* (dated March 29, 2002). This EA was developed pursuant to these laws and regulations.

AR 200-2 specifically includes in its list of Army actions that normally require an EA [32 CFR 651.33 (c)] changes to established installation land use that generate impacts on the environment. An EA is intended to assist agency planning and decision-making. While required to assess environmental impacts and evaluate their significance, it is routinely used as a planning document to evaluate environmental impacts, develop alternatives and mitigation measures, and allow for agency and public participation (32 CFR 651.20).

The Proposed Action (Alternative I, the preferred alternative) and subject of this Environmental Assessment (EA) is the Implementation of the Land Use Plan for Fort Detrick, Maryland. This action is comprised of a number of projects for construction and operation of new facilities and infrastructural improvements within the Installation:

- Demolition of some existing buildings which are poorly situated, energy inefficient, and maintenance intensive. Because of distances among buildings, their operation results in wasted time when in-person coordination among offices and activities is required. These buildings were initially designed for an activity other than the one currently served or to house the activity temporarily. Some of these buildings were constructed during WWII as temporary structures. The 23 buildings which will be demolished occupy approximately 152,000 gross square feet (gsf) of space:
- New construction of four better situated, energy efficient buildings to replace those demolished. The approximate size of the new buildings will be 169,000 gsf;
- Infrastructural improvements to Fort Detrick including reconfiguration of the Main Gate, Old Farm Gate, Opossumtown Gate, and internal roads. Additional parking lots and reconfiguration of some existing parking lots are included. These improvements to the gates and roadways will alleviate traffic congestion while providing improved security for the Installation workforce and residents of Fort Detrick;
- Designation of an approximately 200-acre area within Area A for a new BioMedical Research Park. Installation of roads and initial utilities to serve future tenants with biomedical research and development missions is included;
- Increased recreational opportunities for the workforce and residents of Fort Detrick;
- Enhancement of educational opportunities for children of Fort Detrick residents;
- Expansion of wetlands and increased forestation; and a
- Variety of security upgrades to protect both the workforce and residents of Fort Detrick.

These projects, which are described in detail in Section 2.5, are required for Fort Detrick and its tenants to advance their respective missions.

1.1 MISSION REQUIREMENTS

The following Mission Statement, as formulated by the Fort Detrick Board of Directors, addresses the Installation's reason for being and specifies the functional role Fort Detrick is going to play:

"Command, operate and administer resources to provide quality support to DoD and non-DOD customers meeting their current and future mission requirements through an innovative, quality workforce using best business practices.

Fort Detrick serves four of the President's cabinet-level agencies: Department of Defense (DoD), Department of the Treasury, Department of Agriculture (USDA), and Department of Health and Human Services (DHHS) involved in (missions of) biomedical research and development, medical materiel management, global telecommunications and rapid detection of new and emerging crop pathogens.

Within the Department of Defense, Fort Detrick supports elements of all four military services. Major Department of the Army tenants include the U.S. Army Medical Research and Materiel Command, the U.S. Army Medical Research Institute of Infectious Diseases, the U.S. Army Medical Materiel Agency and the 1108th U.S. Army Signal Battalion."

This clearly indicates the scope and direction of Fort Detrick's activities and will serve as a template for decision-making by people at all levels within the Installation (U.S. Army Garrison [USAG], 2003d). Implementation of the Land Use Plan for Fort Detrick, Maryland (the Proposed Action) will allow USAG to meet the mission requirements described above.

1.2 STRATEGIC PLAN

The Fort Detrick Strategic Plan 2003 (USAG 2003d) provided a situational analysis of the Installation's strengths, weaknesses, opportunities and threats, as a basis for strategic goals and objectives. Several of the strengths have been significant factors in attracting tenants with biomedical research and development missions:

- Approximately 800 acres of undeveloped real estate is available to meet DoD and mission related requirements.
- One of few military installations with its own state-of-the-art, state-permitted, self-contained landfill. In addition, the Installation owns and operates incinerators meeting all State of Maryland air pollution standards and state-permitted for disposal of "Special Medical Wastes". Fort Detrick is suited to support unique medical missions.
- Fort Detrick is viewed favorably by local community leaders and elected officials and is the largest employer in Frederick County, one of the fastest growing counties in the State of Maryland, with quality educational facilities and social and cultural activities.
- Workforce is motivated, well trained, and exceedingly knowledgeable about the utilities and requirements of the specialty units on the post.

The following noteworthy weakness is also addressed in the Proposed Action:

 Antiquated World War II buildings and infrastructure consume valuable time, energy, and other resources that could be used more productively.

On the basis of the situational analysis, the Fort Detrick Board of Directors established goals and objectives. The goals, each of which contributes significantly to achieving the overall vision for the future of the Installation, while supporting Fort Detrick's mission and the Army's tenets and goals are as follows:

- Operate, maintain, develop, and improve quality services and infrastructure;
- Provide a safe, secure and healthy environment for the Fort Detrick community;
- Provide and improve community well being;
- Enhance and improve community well being; and
- Sustain fiscal accountability and respond to customers through effective and efficient business practices.

Each goal will be achieved through accomplishment of several prioritized operational objectives. All of the objectives have an estimated cost and a specific action plan to define supporting tasks and phases. The objectives for Phase I are the active, current business plans for the Installation, encompassing the current (1 to 2 year) budget cycle. The objectives for Phase II (3 to 5 years) and Phase III (6 to 7 years, or longer) provide a mechanism to program budget requirements.

The Strategic Plan for Fort Detrick is a living document; it is reviewed and revised annually. When urgency or timeline dictates, objectives may move to another phase or can be split among two or three phases (USAG, 2003d).

The Land Use Plan implemented by the Proposed Action identifies a number of projects for construction and operation of new facilities and infrastructural improvements and changes in existing land uses within Fort Detrick. It incorporates the objectives established in the *Fort Detrick Strategic Plan 2003* (USAG 2003d). The Land Use Plan process is described in more detail in Section 4.1.2.

1.3 ASSESSMENT APPROACH

This EA provides the best available information, as of August 2003, including guidance provided by Installation personnel on Proposed Projects that may impact land use. Data presented in Sections 2.0 and 4.0 were updated to reflect the current conditions at Fort Detrick. Where conditions have not changed or updated studies have not been accomplished, reference is made to the most recent available source. Additional information may be received and incorporated into the EA during the draft EA public comment period, which extends through 30 September 2003.

This EA is based, in part, on earlier NEPA documentation. This "tiering" approach entails referencing specific analyses, discussions, and conclusions of the earlier documents without providing detailed discussion in the present EA. CEQ regulations encourage agencies to tier environmental documents to eliminate repetitive discussions and to focus the decision process

on the pertinent issues "ripe for decisions at each level of environmental review" (40 CFR 1502.20). Tiering refers to the coverage of general matters in broad-scope documents, with subsequent narrower-scope documents incorporating by reference the general discussions and concentrating primarily on the specific issues (40 CFR 1508.28). Consistent with CEQ guidance, this EA is tiered to the following NEPA studies relevant to the Proposed Action:

- Environmental Assessment for the Construction and Operation of an Electrical Substation by Allegheny Power at Fort Detrick, Maryland. Revised (USAG, 2002g);
- Environmental Assessment for the Construction And Operation of Air Force Medical Evaluation Support Activity (AFMESA) Facilities on Area B - Fort Detrick, Maryland (USAG, 2002f);
- Environmental Assessment (EA) for the Construction and Operation of New Commissary and Post Exchange Facilities and Other Infrastructural Improvements on the South Central Portion of Area A - Fort Detrick, Maryland (USAG, 2002e);
- Environmental Assessment for the Construction and Operation of Family Housing Quarters at Fort Detrick, Maryland (USAG, 2002c);
- Environmental Assessment Fluoridation of the Fort Detrick Drinking Water System (USAG, 2002b);
- Environmental Assessment for the Construction and Operation of an Animal Facility (AF) on Area A - Fort Detrick, Maryland (U.S. Army Medical Research and Material Command [USAMRMC], 2002);
- Environmental Assessment of the U.S. Army Medical Research Institute of Infectious Diseases (USAMRMC, 2001);
- Fort Detrick Environmental Planning Guide (EPG) (USAG, 1998a);
- Environmental Assessment for the Construction of Two Sterilization Facilities, Conversion and Abandonment of the Laboratory Sewer System, and Deactivation of the Steam Sterilization Plant (USAG, 1997a);
- Realignment/Construction Environmental Assessment (Base Realignment and Closures [BRAC] 95), Fort Detrick, Maryland (U.S. Army Corps of Engineers (USACOE), 1996a); and
- Installation Environmental Assessment (U.S. Department of the Army [DA], 1991).

In addition, relevant currently ongoing NEPA documentation includes:

- Draft Programmatic Environmental Impact Statement, Chemical and Biological Defense Program (USAMRMC, 2003);
- Draft Environmental Impact Statement, Construction and Operation of an Integrated Research Facility on Area A at Fort Detrick, Maryland (National Institutes of Health [NIH] and USAG, 2003); and
- Draft Environmental Assessment for the Residential Communities Initiative Fort Detrick, Maryland (USACOE, 2003).

Appendix A provides a complete list of EAs, EISs, and EPGs prepared for activities on Fort Detrick.

The National Cancer Institute at Frederick (NCI-Frederick) is located on approximately 68 acres adjacent to Fort Detrick. This EA does not assess the environmental impacts of NCI's activities and operations.

1.4 OBJECTIVES OF THE INSTALLATION MASTER PLAN EA

The main objective of this EA is to describe potential areas that may be subjected to adverse environmental impacts, including human health impacts, associated with the implementation of Installation development projects and long-term mission-based actions which comprise the Proposed Action (Implement the Land Use Plan for Fort Detrick, Maryland).

A secondary objective of this EA is to provide a reference document that future studies can use for descriptions of the baseline environment of Fort Detrick for subsequent project-specific analyses (i.e., an Environmental Planning Guide). As future actions subject to NEPA review arise at Fort Detrick, the appropriate NEPA document (i.e., Record of Environmental Consideration [REC], EA, or environmental impact statement [EIS]) may incorporate this EA by reference for descriptions of the baseline environment (40 CFR 1502.20 and 1508.28).

There are four categories of actions that are discussed in this EA:

- Approved Projects as described above in Section 1.3, a number of projects are
 occurring or will be occurring on Fort Detrick in the near future. These projects have
 previously undergone NEPA analyses and review (NEPA requirements complete).
 Although not part of the Proposed Action per se, their environmental impacts are
 described in this EA because the projects will be operational in the near future.
- Proposed Projects projects that are discussed and evaluated in detail in this EA (the Proposed Action).
- **Concurrent Projects** projects that are being evaluated in detail in other currently ongoing NEPA documents. Where available, potential environmental impacts, utility consumption, and waste stream disposal requirements are identified.
- Conceptual Projects potential actions for which the project is under study. Where
 available, potential environmental impacts, utility consumption, and waste stream
 disposal requirements of these projects are identified. These projects would be
 evaluated in future NEPA analyses.

1.5 ORGANIZATION OF THIS ENVIRONMENTAL ASSESSMENT

Section 2.0 of this EA provides a complete description of the new facilities and infrastructural improvements that comprise the Proposed Action. This includes an overview of Fort Detrick and current tenants and a brief history of the Installation. Section 3.0 outlines the alternatives considered, including the Proposed Action. Section 4.0 presents a description of the existing environment that would be affected by the Proposed Action. The consequences of the Proposed Action on the existing environmental attributes are described in Section 5.0. Overall conclusions of the effects of the Proposed Action on the environment are given in Section 6.0. Reference

material for this document is provided in Section 7.0. Acronyms and abbreviations used throughout the document are explained in Section 8.0. A list of persons and agencies contacted during the preparation of this document is compiled in Section 9.0. Section 10.0 provides the List of Preparers.